

U.S. Department Of Transportation Federal Highway Administration

400 Seventh St., S.W. Washington, D.C. 20590

December 9, 1999

Refer to: HMHS-SS-68E

Mr. Lawrence Leahy President, Xcessories Squared P.O. Box 135 Auburn, IL 62615

Dear Mr. Leahy:

This is in response to your letter of November 5, 1999, to Mr. Nicholas Artimovich of my staff requesting Federal Highway Administration (FHWA) acceptance of a variation in your company's triangular multidirectional slip base. We previously found your "SB8" breakaway slip bases acceptable for single post supports on September 18, 1996, (Geometric and Roadside Design Acceptance Letter SS-68) and for dual and triple post supports on December 20, 1996, (SS-68A). These designs used triangular plates measuring 203 mm (8 inches) on a side. A 254-mm (10-inch) version for use on single posts was found acceptable by our letter "SS-68D" dated February 22, 1999.

In the currently acceptable design the triangular base plate is welded to a 216-mm (8.5-inch) long, 63.5-mm (2.5-inch) square stub. This assembly is then bolted into a large perforated square stub post. Your current request is for an identical breakaway design using a base plate welded directly to the stub post (which is a minimum of 760 mm [30 inches] long). The welded connection of the base plate directly to the stub post is more substantial than the weld in the current design, indicating that it will hold the base plate at least as well as the currently acceptable design. Therefore, square tube supports using your company's triangular slip base with the base plate welded directly to the stub post are acceptable for use on the National Highway System within the range of conditions that the original design was tested and with the limitations you have placed on it, when requested by a State. This acceptance letter, numbered SS-68E, shall not be reproduced except in full.

Our acceptance is limited to the breakaway characteristics of the supports and does not cover their structural features. Presumably, you will supply potential users with sufficient information on structural design and installation requirements to ensure proper performance. We anticipate that the States will require certification from Xcessories Squared that the slip base hardware and posts furnished will have essentially the same

chemistry, mechanical properties and geometry (except as modified for the larger size) as that used in the tests, and that they will meet the FHWA change in velocity requirements.

Your company's triangular slip bases for square steel tube supports are "proprietary" products. To be used in Federal-aid projects, except exempt, non-NHS projects: (a) must be supplied through completive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with existing highway facilities for that no equally suitable alternative exists or; (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411, a copy of which was provided with earlier correspondence.

The conditions in our original letter of September 18, 1996, which found this base concept acceptable, continue to apply.

Sincerely yours,

Dwight A. Horne, Director Office of Highway Safety Infrastructure